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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,733	11/29/2001	James A. Proctor JR.	TAN-2-1403.06.US	4012

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EXAMINER

HALIYUR, VENKATESH N

ART UNIT	PAPER NUMBER
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2619

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/997,733	Applicant(s) PROCTOR, JAMES A.	
	Examiner VENKATESH HALIYUR	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-75 (claims 1-59 canceled) is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-62, 64-70, 72-75 is/are rejected.
- 7) ☒ Claim(s) 63 and 71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 2/19/2008 has been entered.

2. Claims 60-75 are pending in the application. Claims 1-59 are canceled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 60-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. [US Pat: 6,256,509] in view of Kanerva et al. [US Pat: 5,793,744].

Regarding claims 60,68, Tanaka et al. in the invention of "Broadcast Information

Delivering System” disclosed a base station (**item 20 of Fig 1, col 8, lines 25-42, Fig 6**) comprising: an antenna (**item 31 of Fig 1**); and a controller (**item 21 of Fig 1**) configured to at least one code division multiple access (CDMA) transceiver such that a CDMA connection with at least one CDMA user device is established (**col 7, lines 16-25, Fig 5**), a CDMA control channel (**CCH**) is established (**col 7, lines 27-31**), data is received over the allocable code channels (**TCH, col 7, lines 45-50**) wherein the code channels are divided in time by radio frames that are further subdivided into sub-frames, code channels are allocated on a sub-frame basis to support the received data (**col 6, lines 11-26, Fig 3**), Tanaka et al further disclosed that the CDMA connection is maintained with the at least one CDMA user device when code channels are not allocated to the at least one CDMA user device (**col 7, lines 65-67, col 8, lines 1-13**), but fails to disclose wherein the allocation of code channels includes adding and removing code channels assigned to the at least one CDMA user device.

However, Kanerva et al in their invention of “Multichannel High Speed Data Transfer” disclosed a method of dynamically increasing or decreasing the number of subchannels (**col 4, lines 23-31**) based on the actual user data rate in CDMA wireless communication system (**col 10, lines 33-67**).

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the method of dynamically increasing or decreasing the number of subchannels for data transfer of a CDMA user device as taught by Kanerva et al to include in the system of Tanaka et al to add and remove code channels assigned to the at least one CDMA user device. One is motivated as such in order to

dynamically allocate code channels by adding and removing code channels based on the data rate of the user device to support high speed data services.

Regarding claims 61, 69, Tanaka et al. disclosed wherein the sub-frame includes at least one time slot **(col 6, lines 16-21)**.

Regarding claims 62,70, Tanaka et al. disclosed wherein the at least one CDMA transceiver is configured to operate over a plurality of allocable radio frequency channels **(col 7, lines 45-50)**.

Regarding claim 64, Tanaka et al. disclosed wherein at least one CDMA transceiver, but fails to disclose that it is configured to operate on a 1.25 MHz frequency channel, however Kanerva et al. disclosed that the CDMA transceiver is operable at 1.25MHz according to CDMA standard **(col 10, lines 34-40, col 1, lines 30-39)** and therefore it is obvious for one of the ordinary skill in the art at the time the invention was made to configure a CDMA transceiver to operate on a 1.25 MHz frequency according to CDMA standard (1.25MHz CDMA is a TIA TR-45.5 standards, which is well known in the art).

Regarding claim 65-66,72-73, Tanaka et al. disclosed that the sub-frames transmitted over a plurality of channels between a base station and a mobile stations in a CDMA system **(col 7, lines 16-25)**, but fails to disclose the bandwidth management function in configured for allocating the code channels on an as-needed basis, with the number of allocable code channels being variable during the duration of a communication session and the bandwidth management function is configured to deallocate an initially assigned code channel when there is no data is received from the

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at least one CDMA user device (**col 3, lines 47-67**). However, Kanerva et al disclosed a method of dynamically increasing or decreasing the number of subchannels (**col 4, lines 23-31**) based on the actual user data rate (bandwidth) in CDMA wireless communication system (**col 10, lines 33-67**).

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the method of dynamically increasing or decreasing the number of subchannels for data transfer of a CDMA user device as taught by Kanerva et al to include in the system of Tanaka et al a bandwidth management function configured for allocating the code channels on an as-needed basis, with the number of allocable code channels being variable during the duration of a communication session. One is motivated as such in order to efficiently manage channel bandwidth on a as need basis by allocating and deallocating code channels to the user device during the communication session.

Regarding claim 67, 74, Tanaka et al. disclosed wherein the at least one CDMA transceiver is further configured to receive a message over the CDMA control channel from the at least one CDMA user device to facilitate a higher data service rate for the at least one CDMA user device (**col 5, lines 42-49, col 7, lines 16-25**).

Regarding claim 75 Tanaka et al. disclosed wherein a communication session is established over the CDMA connection wherein data and voice signals are converted to a standard format (**col 9, lines 55-67, col 10, lines 1-15**).

Allowable Subject Matter

5. Claims 63, 71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach and render obvious the limitation wherein CDMA control channel enables the code channels to be reallocated without reestablishing a code phase lock over the CDMA connection when data is not being received from the at least one CDMA user device.

Conclusion

6. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached @ (571)-272-7884. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

/Venkatesh Haliyur/

Examiner, Art Unit 2619

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619